



UNITED STATES PATENT AND TRADEMARK OFFICE

44 ✓
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,242	01/19/2005	Eleanor Bernice Ridley	HP/15-22715/A/MA 2224/PCT	6482
324	7590	01/11/2008	EXAMINER	
JoAnn Villamizar Ciba Corporation/Patent Department 540 White Plains Road P.O. Box 2005 Tarrytown, NY 10591			ROGERS, JAMES WILLIAM	
			ART UNIT	PAPER NUMBER
			1618	
			MAIL DATE	DELIVERY MODE
			01/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/523,242

Applicant(s)

RIDLEY ET AL.

Examiner

James W. Rogers, Ph.D.

Art Unit

1618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/12/2007 has been entered.

The amendments to the claims filed 07/12/2007 has been entered.

Response to Arguments

Applicant's arguments see Applicant Arguments/Remarks Made in an Amendment, filed 07/12/2007, with respect to the 35 USC § 112 second paragraph and the prior art rejections over Galleguillos et al. (US 6,361,768 B1), Strasilla et al. (US 4,460,567) and Mita et al. (US 5,278,269) have been fully considered and are persuasive. The 35 USC § 112 second paragraph, § 102(b) and § 103(a) rejections over the claims has been withdrawn.

Claim Objections

Claim 7 is objected to because of the following informalities: in the last line of the claim the comma "," before the period "." is incorrect since it is not proper to place a comma before a period. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

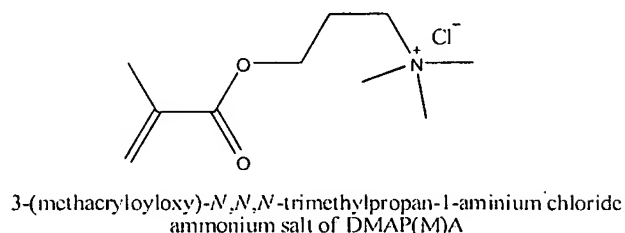
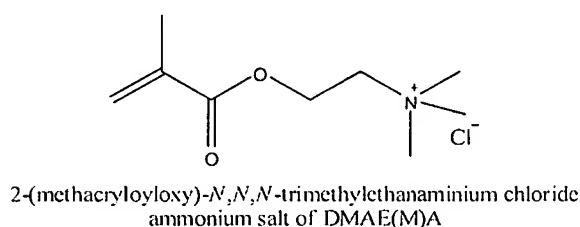
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,5-6,7,10 and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Cockcroft et al. (WO 02/40622).

Cockcraft teaches solutions of cationic copolymers in personal care formulations. See abstract. The cationic polymers include at least one nonionic monomer preferably including acrylamide and its derivatives such as N,N-dimethyl acrylamide (meeting the limitations of the monomer of formula II within claims 1,6,7 and 14). See page 3 line 22- page 4 line 6. The cationic polymer also includes at least one cationic monomer that are preferably chosen from di-C₁₋₄ alkyl amino alkyl(meth)acrylamides such as dimethyl amino ethyl(meth)acrylate DMAE(M)A and dimethyl amino propyl(meth)acrylate DMAP(M)A, it is preferable that the above methacrylates are quaternary ammonium salts such as ammonium chloride (meeting the limitations of the monomer of formula I within claims 1,5,7 and 13). See page 4 line 8- line 22 and claims 1-5. The figure below shows the ammonium chloride salts of DMAE(M)A and DMAP(M)A.

Figure 1



Regarding claim 10 Cockcraft teaches several water based cosmetic formulations that incorporate the cationic copolymer. See page 7 lines 19-25.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green et al. (US 6,365,656) in view of Cockcroft et al. (WO 02/40622) in view of Lentini et al. (US 5,665,368, cited previously).

Green discloses liquid dispersions containing polymers dispersed in a di- or triglyceride oil that are particularly useful in personal care compositions. The polymer may be a cationic copolymer formed from cationic monomers including dialkylaminoalkyl (meth)acrylate quaternary ammonium chlorides such as the ammonium salt of DMAE(M)A, thus meeting the limitations of monomer I within claims 1,5,7,9 and 13. See col 5 lines 26-44. The cationic copolymer could further comprise non-ionic monomers including acrylamide and methacrylamide. See col 5 lines 45-46. The polymers were advantageously crosslinked with diethylenically unsaturated compounds preferably methylene-bis-acrylamide in amounts ranging from 100 to 10,000 ppm, most preferably from 500-900 ppm. See col 5 line 64-col 6 line 11. Thus Green discloses the same crosslinkers such as methylene-bis-acrylamide as applicant's claims 1,4,7-9 and 15 and the amounts disclosed overlap applicants claimed range. Green discloses that polymers are sufficiently crosslinked to swell but not dissolve in water and further discloses the optimum amounts of crosslinker can be found by routine experimentation. See col 2 lines 64-66 and col 6 lines 10-11. Thus the amount of crosslinker claimed would be obvious to find through routine and ordinary experimentation to optimize the concentration of crosslinker in order to provide the desired solubility to the polymer so that it swells upon exposure to water but does not dissolve. Regarding claims 2,3,8,9 and 15 which limit the % wt of monomer I and II

within the copolymer, Green discloses that the cationic monomer (corresponds to monomer 1) is more than 50% of the polymer and most preferably at least 80% by weight, thus the remainder 20% would be comprised of the nonionic monomer, the amounts above are within applicants claimed range.

Green while disclosing nonionic monomers such as acrylamides is silent on the use of acrylamides that meet the proviso within applicants claim 1 that at least one of R_6, R_8 and R_9 is C_1-C_4 alkyl for monomer II. Green while disclosing the use of oils in personal care compositions does not disclose the amounts of copolymer or oil component within applicants claimed range within dependent claims 11-12.

Cockcroft is disclosed above and is used primarily for the disclosure within that cationic polymer useful in personal care compositions were already well known to include nonionic monomers such as N,N-dimethyl acrylamide that meets applicant's claimed monomer II within claims 1,6,7,9 and 14. Thus the claimed copolymer would have been *prima facie* obvious because the substitution of one known element such as the non-ionic acrylamides disclosed within Green for another known element such as the specific nonionic acrylamides such as N,N-dimethyl acrylamide disclosed within Cockhold would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Lentini is used only for the disclosure within that oils were already well known at the time of the invention to be used in a large variety of concentrations in cosmetics depending upon the application, for instance the cosmetics disclosed within Lentini had an oil content of from about 20-80 percent, overlapping the amounts claimed in claims

11-12. See abstract, col 2 lines 58-61 and claim 1. Lentini discloses that the oil in the personal use compositions can function as emollients that help maintain softness, smoothness and pliability of the skin. Lentini also discloses that the oils can act as occlusive agents that increase the water content of skin and hair by minimizing the evaporative loss of water from skin and hair surfaces. See col 4 lines 40-47. It would therefore be obvious to one of ordinary skill in the art that the personal care compositions disclosed by Green and Cockcroft could be modified to have desirable emollient and occlusive properties by varying the amount of oil over a wide range as disclosed by Lentine in order to obtain a cosmetic with the desired properties.

Conclusion

No claims are allowed. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Rogers, Ph.D. whose telephone number is (571) 272-7838. The examiner can normally be reached on 8:30-5:00.

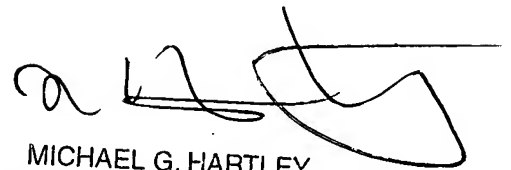
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Application/Control Number:
10/523,242
Art Unit: 1618

Page 8

you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Michael G. Hartley', with a large, stylized flourish at the end.

MICHAEL G. HARTLEY
SUPERVISORY PATENT EXAMINER